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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,590	11/06/2001	James Austin Kendrick	98B014C	3670
23455	7590	08/23/2004	EXAMINER	
EXXONMOBIL CHEMICAL COMPANY			DOROSHENK, ALEXA A	
P O BOX 2149			ART UNIT	PAPER NUMBER
BAYTOWN, TX 77522-2149			1764	

DATE MAILED: 08/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/992,590

Applicant(s)

KENDRICK ET AL.

Examiner

Alexa A. Doroshenk *ADD*

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 55 is/are allowed.
- 6) ☒ Claim(s) 1,21,24,27,35,40,45 and 50 is/are rejected.
- 7) ☒ Claim(s) 2-20,22,23,25,26,28-34,36-39,41-44,46-49 and 51-54 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 03/15/04; 07/16/03; 11/13/02;
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Information Disclosure Statement*

1. The references which have been initialed but also crossed out have been considered by the examiner but will not appear on the face of that patent, if one is to be issued.

### *Specification*

2. The disclosure is objected to because of the following informalities: The status of the related applications should be updated in the first sentence of the specification as some of them are now abandoned or patented.

Appropriate correction is required.

3. The abstract of the disclosure is objected to because it does not reflect the claimed invention. Correction is required. See MPEP § 608.01(b).

### *Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 21, 24, 27 and 50 are rejected under 35 U.S.C. 102(b) as being anticipated by Isaachsen (1,693,786).

With respect to claim 1, Isaachsen discloses a loop reactor (a) comprising:  
a discharge conduit (d) extending into the loop reactor (a) wherein the conduit (d) has a portion which is curved along its longitudinal axis; and

Art Unit: 1764

an opening (near e) facing the flow of the slurry (see arrow).

With respect to claims 21 and 24, it can be seen in figure 1 of Isaachsen that the discharge conduit (d) is curved along its longitudinal axis from about 75 degrees to about 135 degrees.

With respect to claim 27, Isaachsen discloses wherein the face of opening (e) defines a plane with intersect an outside wall of the loop reactor (a) at a tangent line perpendicular plane (see figure 1).

With respect to claim 50, Isaachsen discloses wherein the opening (e) is located inside the loop reactor (a) at a point wherein the concentration of solids in the slurry is higher (p. 2, lines 4-10).

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 35, 40 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isaachsen (1,693,786).

With respect to claims 35, 40 and 45, Isaachsen discloses all of the structural elements as discussed above, but only has the general teaching that the opening is smaller than the diameter of the inside diameter of the loop. It is held that it would have been obvious to one of ordinary skill in the art at the time the invention was made to select structural elements of an appropriate size in order for the apparatus to operate.

In re Russell, 169 USPQ 426 (CCPA 1971).

***Allowable Subject Matter***

8. Claim 55 is allowed.
9. Claims 2-20, 22, 23, 25, 26, 28-34, 36-39, 41-44 and 51-54 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
10. The following is a statement of reasons for the indication of allowable subject matter: The prior art neither teaches nor suggests wherein the curved discharge conduit is located within a curved portion of the loop reactor or wherein the opening of the curved discharge conduit is located closer to the outside wall of the loop reactor than to the inside wall.


***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexa A. Doroshenk whose telephone number is 571-272-1446. The examiner can normally be reached on Monday - Thursday from 9:00 AM - 7:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1764

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Alexa A. Doroshenk  
Examiner  
Art Unit 1764